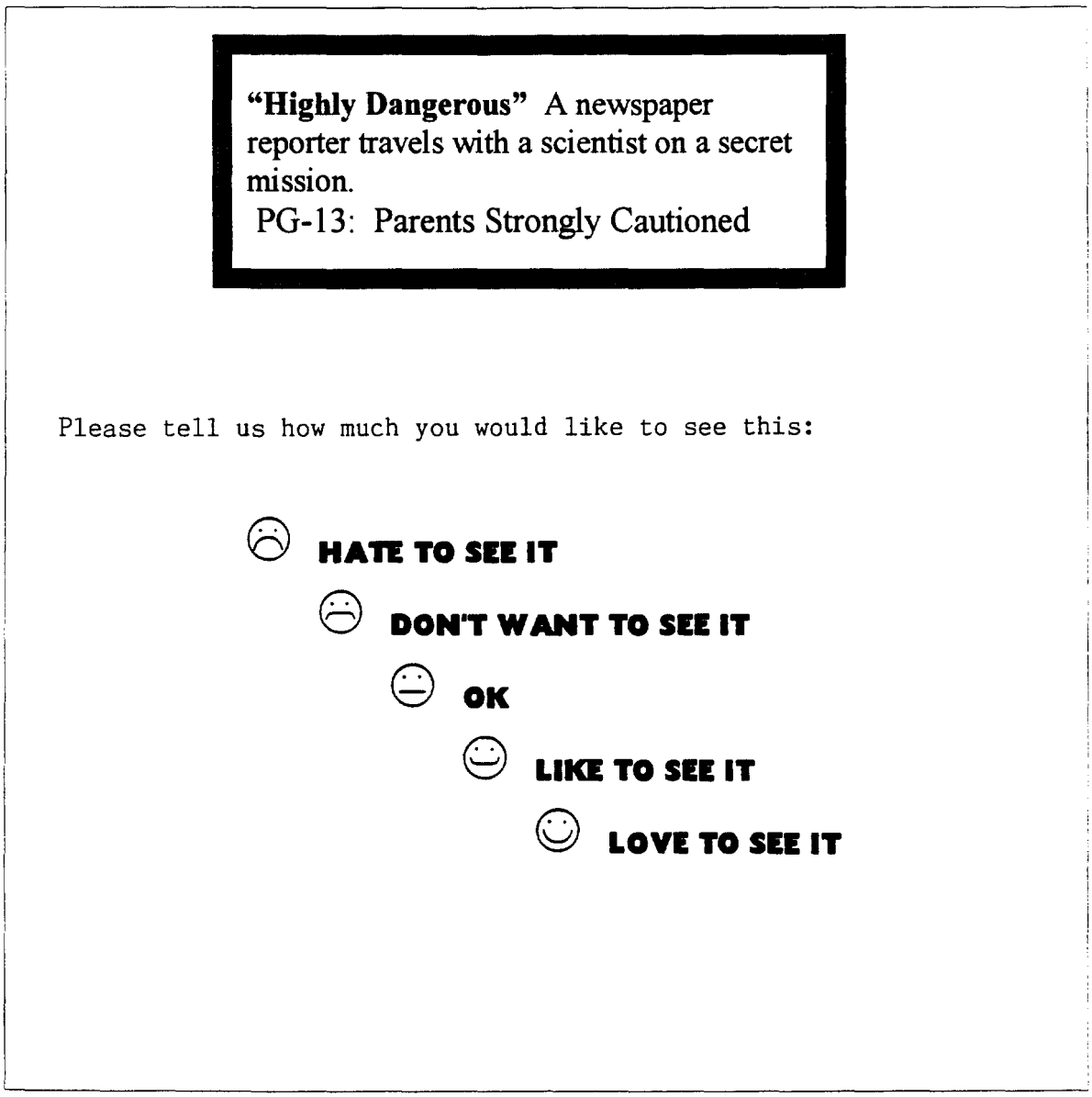
analyses, these responses were given values of 1 through 5, respectively. The response choices were associated with icons of faces expressing various levels of negative to positive affect. Figure 1 displays the response choices.

Figure 1
Example of Rating Scale for Desire to See Programs



The eight rating and advisory systems that were tested are described below. Figure 2 lists these systems and the levels that were tested.

Figure 2
Advisory and Rating Systems Tested

PARENTAL ADVISORIES:	None Parental discretion advised Contains some violent content. Contains some violent content. Parental discretion advised
VIEWER ADVISORIES:	None Viewer discretion advised Contains some violent content Contains some violent content. Viewer discretion advised
MPAA RATINGS:	None G: General Audiences PG: Parental Guidance Suggested PG-13: Parents Strongly Cautioned R: Restricted
PREMIUM CODES:	None MV: Mild Violence V: Violence GV: Graphic Violence
RSAC RATINGS:	None Violence: Creatures killed Violence: Humans killed Violence: Humans injured or killed; blood and gore Violence: Wanton and gratuitous violence
CANADIAN RATINGS:	No violence Comedic violence Mild violence Brief violence Violence Graphic violence
AGE INDICATORS:	None For all ages For age 8 and up Not for kids under 8 For age 13 and up Not for kids under 13 For age 17 and up Not for kids under 17
AWARDS:	None Parents' Choice Award Teens' Choice Award Kids' Choice Award

Parental discretion advisory. The program associated with the various levels of the parental discretion advisory was called *Chicago Force*. All children received the following plot description of this program: "Detective Malone tries to stop a terrorist gang before they attack a busy train station." This description was followed either by no advisory, or by one of the following three advisories: "Parental discretion advised," "Contains some violent content," or "Contains some violent content. Parental discretion advised."

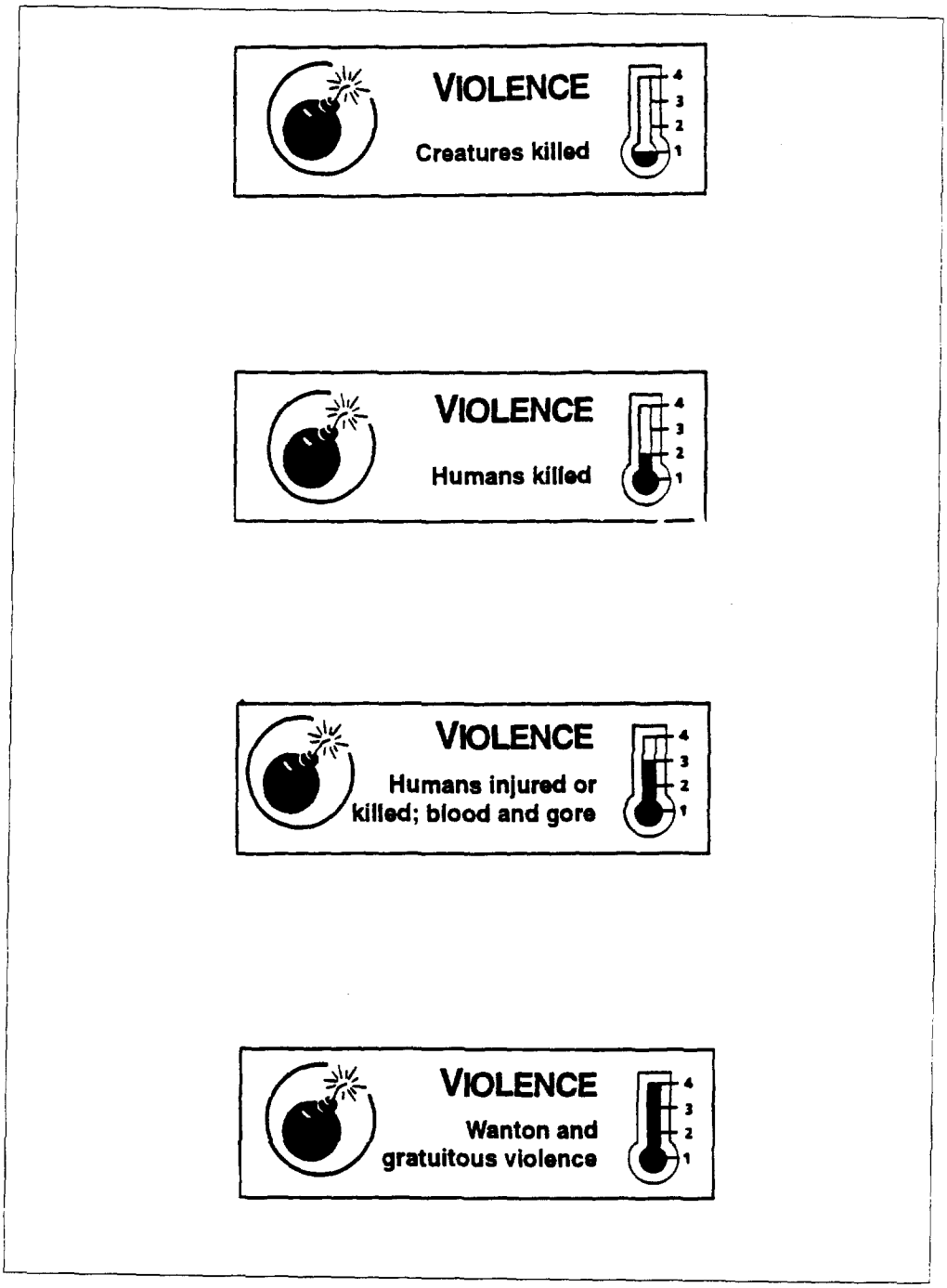
Viewer discretion advisory. Children received the following description of a program called *Camcorder L.A.*: "Amateur video of a bank robbery." This description was followed at random either by no advisory, or by one of the following advisories: "Viewer discretion advised," "Contains some violent content," or "Contains some violent content. Viewer discretion advised."

MPAA ratings. To test the effect of MPAA ratings, children read the following description of *Highly Dangerous*: "A newspaper reporter travels with a scientist on a secret mission." This description was followed at random either by no rating, or by one of the following MPAA ratings: "G: General Audiences," "PG: Parental Guidance Suggested," "PG-13: Parents Strongly Cautioned," or "R: Restricted."

Premium channel codes. To explore the impact of ratings currently used by some premium cable channels (HBO, Showtime, and Cinemax), the following plot description for a 1964 movie called *The Moon-Spinners* was used: "A girl and a boy travel to an island to capture a jewel thief." This description was followed at random either by no rating or by one of the following content codes: "MV: Mild Violence," "V: Violence," or "GV: Graphic Violence."

Recreational Software Advisory Council (RSAC) ratings. The following plot description for a movie entitled *Return of the Dinosaurs* was used to test the impact of the RSAC ratings: "Three kids enter a world where dinosaurs become real." This description was followed at random either by no advisory, or by "VIOLENCE: Creatures killed" (accompanied by a graphic of a four-level thermometer with its "mercury" at level one); "VIOLENCE: Humans killed" ("mercury" at level two); "VIOLENCE: Humans injured or killed; blood and gore" ("mercury" at level three); or "VIOLENCE: Wanton and gratuitous violence" ("mercury" at level four). Figure 3 shows the four levels of this rating that were used.

Figure 3
Levels of RSAC Ratings Used



Canadian ratings. The following plot description for a program entitled *On the Streets* was used to explore the impact of the ratings currently being used in Canada in connection with their V-chip trials: "Newly arrived in town, Mike has his eyes opened about city life." This description was followed at random by one of the following advisories: "No violence," "Comedic violence," "Mild violence," "Brief violence," "Violence," or "Graphic violence."

Age indicators. A movie entitled *Tough Guy* had the following description: "Rich kid runs away from home and gets mixed up with crooks." This description was followed at random either by no advisory, or by one of the following advisories: "For all ages," "For age 8 and up," "Not for kids under 8," "For age 13 and up," "Not for kids under 13," "For age 17 and up," and "Not for kids under 17."

Awards. To assess how children respond to positive labels attached to programs, children read the following description of the movie *The Challenge*: "Unpopular schoolmates finally teach school bully a lesson." This description was followed by either no rating or by one of the following three awards: "Parents' Choice Award," "Teens' Choice Award," or "Kids' Choice Award."

In the selective exposure questionnaire, the eight pages that involved random assignment of advisories and ratings were independently randomized so that there would be no systematic effects of questionnaire structure. For example, there were four different versions of some pages, five of others, six of others, etc. A series of random orders of four, five, and six numbers (and so on) was generated by computer, and the versions of each page were stacked in these orders until eight stacks, one for each program description, were obtained. The booklets were then collated from these randomly ordered stacks of page versions. As a result, random assignment to conditions was independent for each manipulated variable. In other words, a participant's assignment to a level of a rating or advisory on one page was entirely independent of his or her assignment to a rating level on the other seven pages.

Questionnaire on Expectations

The second booklet contained questions designed to assess children's expectations of the content of each movie or program they had read about in the first booklet, and their views regarding the age of viewer each show was geared toward. So that the children would not forget the information on the shows they had received earlier, each page contained the same description and rating they had seen in the first booklet. After reviewing each description, the children were asked how violent and how scary they expected the program to be. Response options ranged from "not at all [violent or scary]," coded as 0, to "very very [violent or scary]," coded as 4, with the size of the

letters increasing with the intensity of the response. Next, children were asked "What is the youngest age that this program is meant for?" The respondents were provided with a list of numbers ranging from 1 to 20 and were asked to circle one number.

Video Clip

All groups of children saw the same video clip: an eight-minute edited version of the 1964 Disney movie *The Moon-Spinners*. It should be noted that, depending on the questionnaire version they received, children were led to believe that the movie they were about to see was either not associated with a content code, or associated with the content code "MV," "V," or "GV."

The video clip depicted the story of an adolescent girl (played by Hayley Mills), who helps a young man who had earlier been framed for a jewel theft. Together, they catch the criminal who really stole the jewels and safely return them to their owner. The clip was edited to contain enough of the entire plot to make sense as a story involving a clearly discernible "hero" and "villain." It contained two fight scenes between the young man (the "hero") and the older male criminal (the "villain"). The fight scenes depicted fist-fighting between the hero and villain, with the villain also using a fishing harpoon as a weapon, and trying to run the hero over with a motorboat. The second fight scene ended with the story's resolution, in which the villain is arrested and the hero is vindicated.

Questionnaire on Reactions to Violent Video

The first segment of the movie-rating questionnaire began with items measuring how much the participants liked the video clip. Responses ranged from 0 ("not at all") to 4 ("very, very much"). Children also rated how exciting and violent they thought the scenes were, on scales ranging from "not at all" exciting or violent to "very very" exciting or violent. Participants were also asked to think back to the two fight scenes and to estimate, for the first scene, how much the hero had been hurt by the villain ("not hurt" to "very very hurt"), and for the second scene, how hard the hero had hit the villain ("not hard" to "very very hard"). Children also indicated how right or wrong they thought it was for the hero to hit the villain ("very very right," coded as 8, to "very very wrong," coded as 1). The hero and villain were referred to by name and appearance (e.g., "Mark, the young man in the white shirt") and not designated in the questionnaire as "hero" or "villain." Next, a question measuring memory for the rating of the video clip was included as a manipulation check.

A final demographic question asked participants to indicate how they would describe their ethnic group. The ethnic-group choices were "Black (African-American),"

"White (Caucasian)," "Asian or Pacific Islander," "Hispanic (Latino)," "American Indian or Alaskan Native," and "Other (or combination of the above; please describe)."

A statement thanking the students for their help and asking them not to discuss the study with the other children until testing had been completed appeared at the end of the questionnaire.

Results: Interest in Programs

Initially, three-way analyses of variance (ANOVA) were run using the child's sex, age (5-9, 10-15), and experimental condition as factors. However, these analyses revealed very few significant effects for ratings, but several main and interaction effects involving age. Given that previous developmental research has found that younger children are more likely to use extreme values on scales (e.g., Surber, 1984), and that our sample contained a wide variation in age range, we suspected that heterogeneity of variance might be a problem with our interval-level dependent variable. Procedures recommended by Keppel (1991) were used to determine whether the assumption of homogeneity of variance was met in our data. By dividing the largest within-groups variance by the smallest within-groups variance for the analysis of each rating system, we found that the resulting quotient exceeded the critical value of 3.0 in seven out of eight cases (F_{max} was as follows: Parental Advisories = 3.4, Viewer Advisories = 3.4, MPAA ratings = 3.4, Premium Channel Codes = 2.7, RSAC = 4.9, Canadian Ratings = 3.9, Age Indicators = 5.1, and Awards = 3.0). In all cases, the group of younger children exhibited more variation in their responses than the older group.

Although our analytic test, analysis of variance, is usually robust to this violation, Keppel (1991) notes that heterogeneity of variance becomes problematic when the number of participants in each condition is unequal. Because this condition was also present in the data, all subsequent analyses were performed on the two age groups separately. When homogeneity of variance quotients were again computed within each of the two age groups, all of the values were well below the 3.0 limit, indicating that the separated data sets did not violate the homogeneity assumption.

Because the children were exposed to one of two questionnaire orders, question order was used as a covariate in our analyses to remove any effect that questionnaire order may have had on the children's responses.

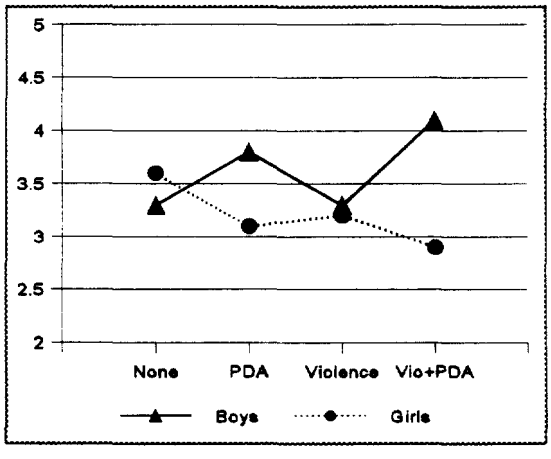
Within each of the two age groups, two-way analyses of covariance (ANCOVA) were performed to judge the impact of each program rating and the child's sex on participants' interest in viewing the shows. Significant main effects were explored with post-hoc Tukey tests which were modified to adjust for our factorial design (Toothaker,

1993). A similar modification of the one-way Tukey procedure was used to explore significant interaction effects. Specifically, simple effects comparisons were made so that the effect of the ratings or advisories on boys and girls separately could be determined. Only effects that reached the $p < .05$ level of significance, or approached it at $p < .10$ are reported here. For comparisons among means reported in the figures, cells having no letter in common differ significantly at $p < .05$.

Parental Advisories

Younger children. The interaction between sex and the four levels of the advisory approached significance in the analysis of the effect of parental advisories on interest in *Chicago Force*, $F(3, 165)=2.12$, $p = .10$. As Figure 4 shows, younger boys' interest in the program was highest when it was associated with some mention of parental discretion. This trend is consistent with the findings from Year 1, which revealed greater interest among boys in shows bearing a parental advisory. As Figure 4 also shows, younger girls' interest in the program was lowest when either "parental discretion advised" or "contains some violent content, parental discretion advised" was shown. None of these post-hoc comparisons reached significance, however.

Figure 4
Effect of "Parental Discretion Advised" and "Contains Some Violent Content" on Younger Children's Interest in a Program

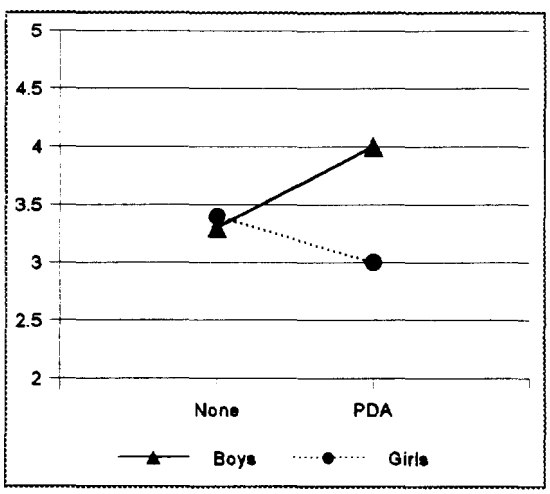


Note. Scores could range from 1, "hate to see it," to 5, "love to see it."

In order to test the impact of the parental advisory separately from the mention of violence, a 2 (presence vs. absence of "parental discretion advised") by 2 (presence vs. absence of "contains some violent content") X 2 (child's sex) ANCOVA was performed. A main effect for sex was observed in this analysis, $F(1, 165)=4.34$, $p < .05$, as males

were more interested in the program (M = 3.6) than females (M = 3.2). In addition, a significant interaction between sex and "parental discretion advised" was detected, F(1,165)=5.69, p < .05. As can be seen from Figure 5, for boys, interest in the program was higher when parental discretion advised was mentioned (M = 4.0) than when it was absent (M = 3.3). Girls, however, were more interested in the show when parental discretion was not mentioned than when it was (M = 3.4 vs. 3.0, respectively). Subsequent comparisons were again not significant, however. There were no significant effects involving "contains some violent content." This finding is consistent with the interpretation of the Year 1 data that supported a stronger "forbidden fruit" effect than an information effect of "parental discretion advised."

Figure 5
Effect of "Parental Discretion Advised" on Younger Children's Interest in a Program



Note. Scores could range from 1, "hate to see it," to 5, "love to see it."

Older children. The parental advisories did not significantly affect older children's interest in seeing the program.

Viewer Advisories

Younger children. Although a significant main effect of sex emerged, F(1,165)=5.74, p < .05, with boys reporting more interest in *Camcorder L.A.* across all levels of the advisory than girls (3.4 vs. 2.8, respectively), there was no significant effect of advisory nor an interaction effect between sex and advisory.

Parallel to the factorial design used for the parental discretion advisories, a 2 (presence vs. absence of "viewer discretion advised") X 2 (presence vs. absence of "contains some violent content") X 2 (child's sex) ANCOVA was also performed. However, this analysis did not reveal significant effects for either the advisory or the mention of violent content.

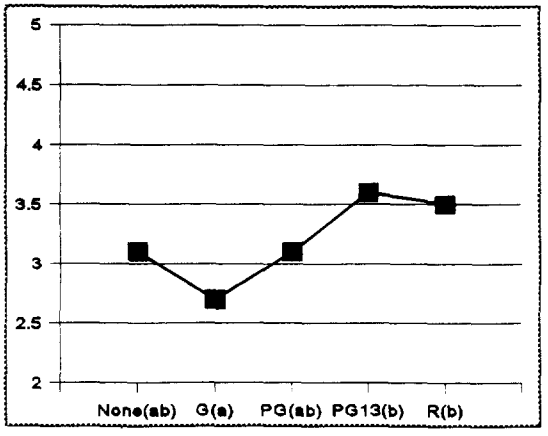
Older children. There were no significant main or interaction effects for "viewer discretion advised" for older children. A marginally significant effect for sex was observed, however, F (1, 187)=3.52, p = .06, with boys reporting more interest than girls (3.3 vs. 3.0). In addition, a three-way interaction approaching significance emerged from the 2 X 2 X 2 ANCOVA, F(1, 187)=3.25, p = .07. However, the pattern was uninterpretable, and none of the subsequent comparisons among the eight means were significant.

MPAA Ratings

Younger children. The MPAA ratings had no significant effects on younger children's interest in seeing *Highly Dangerous*.

Older children. The presence of MPAA ratings had a strong effect on older children's interest in seeing the movie. First, a significant main effect of rating emerged, F(4, 184)=3.33, $p < .01$. Subsequent tests revealed that older children who believed the program was rated "G" were significantly less interested in seeing it (M = 2.7) than children who believed it was either rated "PG-13" (M = 3.6) or "R" (M = 3.5; see Figure 6). The MPAA ratings thus seem to send messages regarding the desirability of content to older children, with a positive association between the restrictiveness of the rating and the appeal of the material.

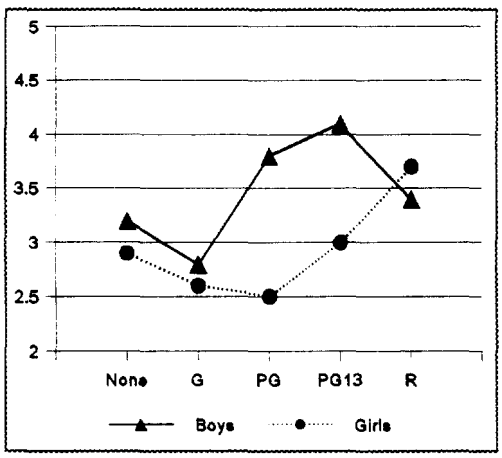
Figure 6
Effect of MPAA Ratings on Older Children's Interest in a Movie



Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 1, "hate to see it," to 5, "love to see it."

Qualifying this main effect was a significant interaction between rating and sex, $F(4,184)=3.55$, $p < .01$. Although post-hoc tests did not reveal any significant differences, Figure 7 reflects that although more restrictive ratings made the movie more attractive to both sexes, boys' interest in the movie was highest when it was rated "PG-13," while girls' interest was strongest when it was rated "R."

Figure 7
Effect of MPAA Ratings on Older Boys' and Girls' Interest in a Movie



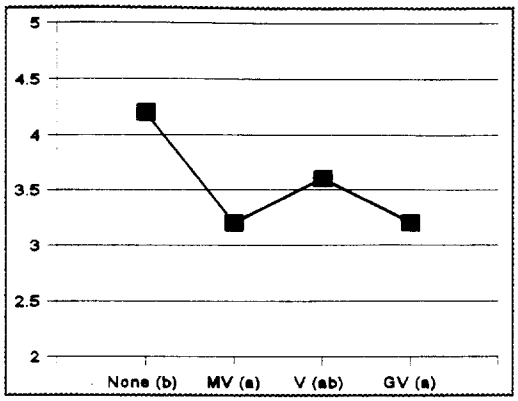
Note. Scores could range from 1, "hate to see it," to 5, "love to see it."

Finally, a significant main effect for sex emerged, $F(1,184)=8.85$, $p<.01$, with boys expressing more interest in the movie overall than girls (3.5 vs. 2.9, respectively).

Premium Channel Content Codes

Younger children. A significant main effect emerged for program rating on younger children's interest in *The Moon-Spinners*, $F(3, 164)=4.70$, $p < .01$. Post-hoc tests revealed that younger children in both the "MV: Mild Violence" and "GV: Graphic Violence" conditions ($M = 3.2$ for both) were *less* interested in seeing *The Moon-Spinners* than those who had seen no rating associated with the movie ($M = 4.2$). This pattern is presented in Figure 8.

Figure 8
Effect of Premium Channel Codes on Younger Children's Interest in a Movie



Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 1, "hate to see it," to 5, "love to see it."

MV: Mild Violence
V: Violence
GV: Graphic Violence

Older Children. No significant differences were detected among the older children's ratings of interest in the movie as a function of the content codes.

RSAC Codes

Younger children. The RSAC codes did not have a significant impact on younger children's interest in *Return of the Dinosaurs*. The only significant effect that was found was a main effect of sex, F (1, 164)=5.35, $p < .05$. Boys were more interested in the show than girls (3.9 vs. 3.4).

Older children. There were no significant effects of the RSAC codes on older children's desire to see the program. A significant effect of sex was observed, however, $F(1,186)=19.78$, $p<.001$, with boys expressing more interest in the show than girls (4.0 vs. 3.2, respectively).

Canadian Ratings

The presence of Canadian ratings did not have a significant effect on younger or older children's interest in viewing *On the Streets*.

To rule out the possibility that our null findings with regard to the Canadian ratings were due to the larger number of conditions that were compared (six rather than five or four conditions, resulting in lower cell sizes and less power), the levels "brief violence" and "mild violence" were combined into one category representing relatively low levels of violence. This analysis revealed an effect of sex approaching significance, among the younger children, F (1, 162)=2.96, $p = .09$, with boys reporting more interest

than girls (3.4 vs. 3.0). There were no significant effects of the ratings for either younger or older children.

Age Indicators

The age indicators did not significantly affect either younger or older children's interest in *Tough Guy*.

Given that eight versions of the age indicators were tested, two theoretically meaningful variables based on combinations of these levels were made to better our chances of finding significant differences. First, levels that highlighted the restrictiveness of the program by claiming it was *not* appropriate for children under a certain age (e.g., "not for kids under ...") were combined. This combined level was then compared to another combination of levels--one that specified the acceptability of the program for certain age groups (e.g., "for age ... and up"). The comparison between these two levels allowed us to test whether children were reacting to the restrictiveness of the language contained in the ratings.

Second, in order to test whether children were reacting to the mention of a specific age, the pairs of levels that specified the same age were combined (e.g., "not for kids under 8" and "for age 8 and up"). This yielded three levels: age 8, 13, and 17.

The two condensed variables and the children's sex were then submitted to a 2 (restrictiveness) X 3 (ages specified) X 2 (sex) ANCOVA. However, no significant differences were detected among either age group.

Awards

Younger children. There were no significant effects of ratings involving awards on younger children's interest in seeing *The Challenge*.

Older children. Older children's desire to see the target program was not significantly affected by the presence of any form of award. However, a main effect for sex was observed, $F(1,151)=5.10$, $p<.05$, with girls reporting more interest in the program than boys (3.5 vs. 3.1, respectively).

Summary of Findings on Interest in Programs

Most of the rating systems did not significantly affect children's interest in programs, but there were a few exceptions. As was observed in Year 1, "parental discretion advised" affected boys and girls differently. For younger children, the

interaction between "parental discretion advised" and sex showed that this admonition tended to increase the interest of boys, but decrease the interest of girls. Counter to the information hypothesis, the phrase "contains some violent content" did not increase children's interest. Unlike last year, the effect of the parental advisory did not occur among boys in the older group.

Only one out of the eight systems significantly affected older children's interest in seeing the programs: the MPAA ratings. The current findings replicate and strengthen the findings of Year 1 that indicated that the more restrictive ratings of "PG-13" and "R" increase a program's attractiveness for many children, and the universally acceptable "G" rating decreases it. The pattern of interest shown in Figure 6 is very much like the pattern observed in Year 1 for children overall. What is new about these data is the difference between boys and girls: This year, boys' interest again peaked at "PG-13," whereas girls' highest level of interest occurred when the movie was rated "R."

It should be noted that this replication was observed with a very different sample from that tested in Year 1. The effect was observed with an entirely different movie and a different type of dependent measurement. In Year 1, this pattern was observed using a forced choice between three movies. In Year 2, the same pattern occurred using a rating scale reflecting level of interest in one movie.

Aside from the significant interaction with gender associated with "parental discretion advised," the MPAA ratings were the only system that significantly increased children's interest in a program or movie. The only other significant effect of ratings was that of the content codes on younger children. The content codes of "MV" and "GV," however, reduced the level of interest in the program, compared to no rating, rather than increasing it.

Impact of Background Variables

To determine the relationship between background variables and children's interest in viewing programs with particular ratings, we built hierarchical multiple regression equations. To understand if the influence of these variables would be different at the various levels of the rating manipulation, we looked at the interaction between each rating and the background variables. On the first step, questionnaire order and the child's sex were entered as controls. Rating condition and background variables were entered on the second and third steps, respectively. Finally, the computed interaction term was entered on the last step of the equation so that the amount of variance that it added could be determined. To understand the form of any significant interaction, partial correlations (controlling for sex and questionnaire order) were run between the background variable and interest in the program at each level of the rating manipulation.

Parental Involvement in Child's TV Exposure

Four questions assessed the degree to which children said their parents were involved in their television viewing. Children were asked how often their parent (defined as their "mom or dad or both, or whoever lives with you and takes care of you") watches television with them, lets them watch whatever TV shows they want, lets them watch TV for as long as they want, and talks to them about what they see on TV. Response options for each question were "never," "some of the time," "most of the time," and "all of the time" (coded as 0 through 3, respectively). We found that 43% of the children said that their parents watch television with them either most or all of the time, and another 51% said they did this some of the time. We also found that 31% said that their parents talk to them about what they watch most or all of the time, and another 29% said they did this some of the time. Further, 59% said their parents let them watch whatever they want most or all of the time, and 30% said this happens some of the time. Finally, 55% said their parents let them watch for as long as they want most or all of the time, and another 25% said this happens some of the time.

A scale was computed to reflect parental involvement by averaging children's responses to these four items (letting children watch any TV shows and letting them watch as long as they want were reverse coded). Scores ranged from 0 to 3, with high scores reflecting higher parental involvement ($M = 1.29$, $SD = 0.64$).

In addition, we divided the scale into two components, one called "parental participation," that reflected the average amount that the children's parents talk to them about television and watch television with them, and one termed "setting limits," which combined the other two items in the parental involvement scale. Analyses involving these variables were performed to assess whether either of these subscales would influence the impact of ratings on youngsters' desire to see programs.

Younger children. The effect of the four-item parental involvement scale was not significantly different at any of the levels of the various ratings systems. Nor was the variable involving setting limits. However, one significant interaction (accounting for an additional 2.4% of variance, $p < .05$) was detected using the parental participation scale and the "contains some violent content" phrase that was paired with the viewer discretion advisory. Subsequent partial correlations revealed a negative relationship between parental participation and children's desire to see *Camcorder LA* when it had the "contains some violent content" label ($r(87) = -.16$, $p = .15$). In contrast, a positive relationship between parental participation and viewing interest was found among children who did not see the "violent content" label ($r(77) = .16$, $p = .16$). This finding suggests that talking about televised content and watching programs with children may

result in children's avoidance of programs with a violence label when they make their own decisions.

Older children. No significant interactions with levels of any rating system were found using the parental involvement scales among the older children.

Children's Aggression

Children's aggression was one of two personality variables that was explored in these analyses. With two questions, children were asked to indicate both how much they "like rough and tumble games" and "get into fights with other kids." Response options ranged from "never" to "all of the time" (coded 0 through 3). We found that 56% of the children said they like rough and tumble games most or all of the time and another 30% said they like them some of the time. Only 21% of the children said they get into fights most or all of the time, and an additional 40% said they get into fights some of the time. Separate interaction terms were computed for each aggression item. This pair of interaction terms was entered as a block at the final step of the equation.

Younger children. The aggression items were significantly related to the effect of ratings on children's desire to see programs in two cases. First, the interaction between the MPAA ratings and getting into fights with other children accounted for a significant 8.4% of variance ($p < .001$). The subsequent partial correlations revealed that more aggressive children were less interested in seeing a movie rated "G" ($r(33) = -.37$, $p < .05$), but more interested in seeing an "R"-rated show ($r(33) = .46$, $p < .01$). The correlations between getting into fights and wanting to see the program were not significant in the no-rating, "PG," and "PG-13" conditions.

Second, a significant interaction between the Canadian codes and liking rough and tumble games was found (R^2 change = 2.3%). This aggression item was negatively related to wanting to see a program with a "no violence" rating ($r(23) = -.65$, $p < .001$), but positively related to wanting to see shows with either a "mild violence" label, ($r(30) = .23$, $p = .21$) or "brief violence" label ($r(32) = .36$, $p = .08$). The correlations between the item and wanting to see the show in the other conditions were trivial in magnitude (ranging from 0 to -.09).

Older children. There were no significant interactions between either of the two aggression items and any of the ratings on older children's desire to see target programs.

Children's Fright

The second personality variable that we explored was the extent to which children have experienced fright from television, movies, or stories. Children were asked to assess how often (coded from 0 to 3) the following statements were like them: "seeing scary things on TV upsets me," "TV shows or movies give me nightmares," and "hearing scary stories makes me scared." Responses showed that 22% of the children said that they get upset from seeing scary things most or all of the time, and another 22% said it happens some of the time. For the nightmare question, 22% responded most or all of the time, and another 25% said some of the time. Finally, 24% of the children said that scary stories make them scared most or all of the time, and another 25% said it happened some of the time. An interaction term was computed for each fright item. These terms were entered as a block at the last step of the regression equation.

Younger children. The interaction between the RSAC codes and fright from hearing scary stories was significant (R^2 change = 2.9%, $p < .05$). Children who had experienced this form of fright and who did not see any rating associated with *Return of the Dinosaurs* were less interested in seeing it ($r(30) = -.51$, $p < .01$). The relationships between fright from scary stories and interest in the program for children who saw any of the RSAC codes were not significant.

Older children. The interaction between older children's fright and ratings was significant in just one situation. Being scared by scary stories had different effects on interest in programs with various Age Indicators (R^2 change = 2.3%). Having experienced fright from hearing a scary story was associated with less interest in *Tough Guy* when it was labeled as appropriate for either 13 or 17 year olds ($r(89) = -.25$, $p < .05$). Although this background variable was not significantly related to children's interest in any of the other conditions, it is interesting to note that the correlations in the more permissive or neutral conditions (i.e., for all ages, for 8 year-olds, no rating) were positive. This suggests that older children's fright reactions lead them to avoid programming that is targeted toward a more mature audience.

Children's Television Habits

Finally, we explored the impact that children's habits and preferences regarding television viewing might have on their interest in seeing programs with different ratings. Children were asked to estimate the number of hours of television they watched the preceding day, and could choose numbers ranging from 0 to "10 or more" ($M = 4.75$, $SD = 3.34$). Children were also asked to indicate how much they like watching TV (options ranged from "not at all" to "very very much" and were coded 0 through 3). On this question, 63% reported "very very much" and another 25% responded "pretty much."

Finally, children were asked how often they watch shows with action or violence, and were provided with options ranging from "never" to "all of the time" (coded 0 through 3). The percentage of children reporting that they watch this type of programming most or all of the time was 58%, and another 27% said they watch this type of programming some of the time.

Interaction terms were computed between each of the three television-viewing variables and each of the eight rating systems, and hierarchical regression analyses were employed as described for the other background variables.

Younger children. Two significant interactions were found for the younger children. First, the interaction between liking to watch TV and the MPAA ratings added a significant amount of variance (6.7%, $p < .01$) to the equation. Subsequent partial correlations revealed that children who like to watch TV were less interested in seeing the target movie when it was rated "G" ($r(33) = -.26$, $p = 13$), but were more interested in it when it was rated either "PG-13" ($r(25) = .15$, $p = .44$) or "R" ($r(33) = .50$, $p < .01$).

Second, a significant interaction was found between liking to watch violent shows and the RSAC ratings, adding 2.9% of variance to the equation ($p < .05$). Partial correlations revealed that liking violent programming was associated with wanting to see a show that had violence at level 2, "VIOLENCE: Humans killed" ($r(32) = .11$, $p = .52$), level 3, "VIOLENCE: Humans injured or killed; blood and gore" ($r(30) = .28$, $p = .13$), and level 4, "VIOLENCE: Wanton and gratuitous violence" ($r(31) = .42$, $p < .05$). However, liking to watch violent shows was negatively related to wanting to see the program when it had no rating ($r(30) = -.12$, $p = .52$).

None of the interactions involving the amount of television that younger children viewed were significant.

Older children. A significant interaction was found between liking to watch violent shows and the MPAA ratings, adding 5.3% more variance to the equation ($p < .01$). Children who like to watch violent shows were less interested in seeing a movie with a "G" rating ($r(31) = -.18$, $p = .31$), but were more interested in seeing a "PG-13" ($r(38) = .67$, $p < .001$) or "R" rated movie ($r(33) = .26$, $p = .13$). None of the other interactions were significant.

Expected Content of Televised Offerings with Ratings and Advisories

Children's expectations of how violent and scary each program would be as a function of the type of rating or advisory it received were explored in two-factor (rating by sex) ANCOVAs. In addition, their perceptions of the age-appropriateness of each

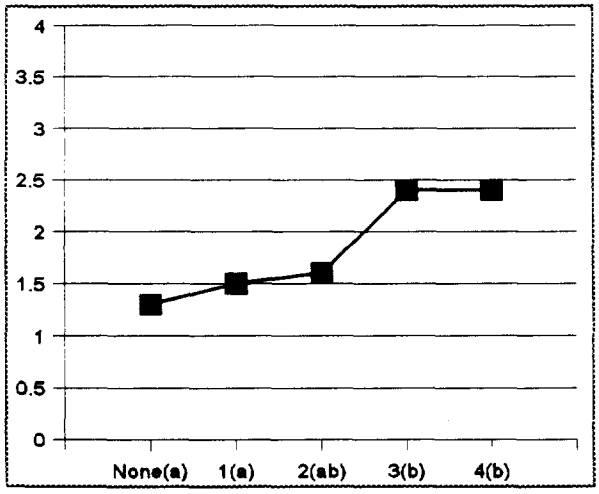
program were examined in parallel analyses. As with the other analyses, post-hoc Tukey tests were performed when significant main or interaction effects were observed. Because of the high number of comparisons involved in these analyses, only results that are significant at $p < .05$ will be reported here. To further simplify the presentation of data, main effects of sex which are not involved in significant interactions will not be reported.

Effects of Ratings on the Expectations of Younger Children

Most of the advisories did not significantly affect younger children's ratings of expected violence, scariness, or age-appropriateness of the programs. The only two rating systems that affected younger children's expectations were the RSAC system and the Canadian Ratings.

RSAC ratings. We found a significant main effect of RSAC ratings on younger children's expectations of violent content, $F(4, 163)=3.14$, $p < .05$. Figure 9 shows the means associated with this effect. Post-hoc tests revealed that children who saw no rating expected significantly less violence ($M = 1.3$) than children who saw either level 3, "VIOLENCE: Humans injured or killed; blood and gore" or level 4, "VIOLENCE: Wanton and gratuitous violence" ($M = 2.4$ for both conditions).

Figure 9
Effect of RSAC Ratings on Younger Children's Expectations of Violent Content



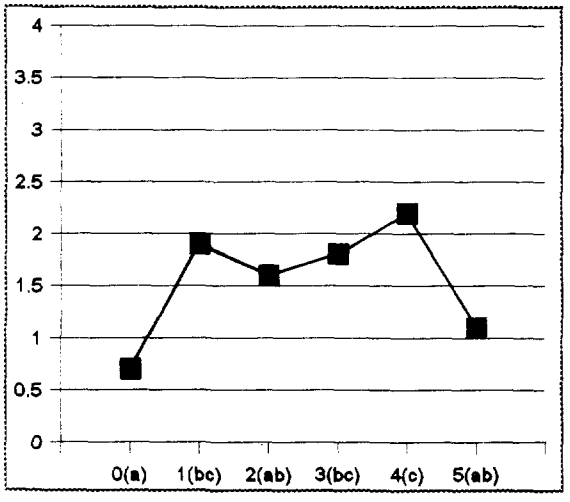
Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 0, "not at all violent" to 4, "very very violent."

1 = "Violence: Creatures Killed"
2 = "Violence: Humans Killed"
3 = "Violence: Humans Injured or Killed; Blood and Gore"
4 = "Wanton and Gratuitous Violence"

Although we also found a significant main effect for rating, F (4, 163)=2.67, p < .05, on expected scariness of the program, none of the post-hoc tests reached significance. The RSAC codes did not influence younger children's perceptions of the age-appropriateness of the program.

Canadian ratings. There was a significant main effect for the Canadian ratings on younger children's expectations for violent content, F (5, 161)=3.75, p < .01. Figure 10 shows the pattern of means. Subsequent tests showed that young children expected less violence in the program when they saw the label "no violence" (M = 0.7) than when they saw "violence" (M = 2.2), "comedic violence" (M=1.9), or "brief violence" (M=1.8). "No violence" was not significantly different from "mild violence" (M=1.6) or "graphic violence" (M=1.1). Moreover, "graphic violence" was significantly lower than "violence." This finding suggests that the younger children did not understand the meaning of "graphic."

Figure 10
Effect of Canadian Ratings on Younger Children's Expectations of Violent Content



Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 0, "not at all violent" to 4, "very very violent."

0 = No Violence
1 = Comedic Violence
2 = Mild Violence
3 = Brief Violence
4 = Violence
5 = Graphic Violence

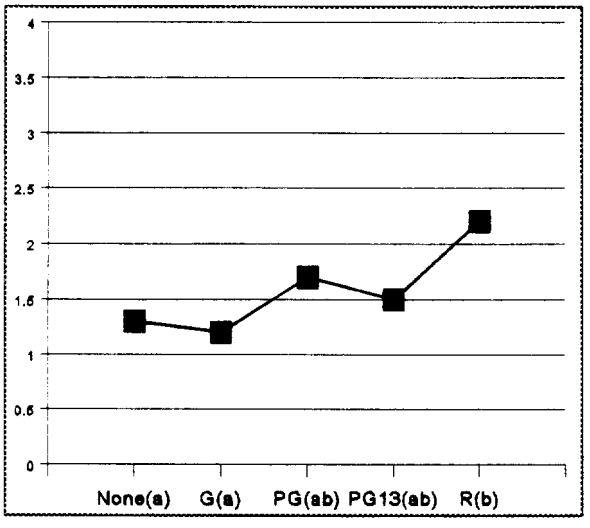
A significant interaction between sex and rating was observed for expectations of scariness, F(5, 159)=2.33, p < .05. However, none of the subsequent tests reached significance. The Canadian ratings did not affect younger children's expectations of age-appropriateness.

Effects of Ratings on the Expectations of Older Children

The various rating systems had stronger effects on the older children's expectations of program content. Although the parental and viewer advisories and the awards did not exert significant effects, all of the other systems affected children's expectations.

MPAA ratings. The main effect for rating on older children's expectations of violence was significant, $F(4, 185)=3.36$, $p = .01$. Figure 11 shows the means associated with this effect. Subsequent tests revealed that older children who saw the "R" rating expected to see more violence in the program ($M = 2.2$) than those who either saw no rating ($M = 1.3$) or the "G" rating ($M = 1.2$).

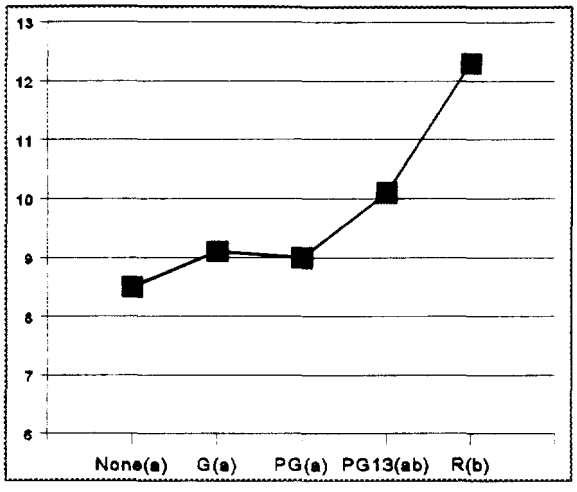
Figure 11
Effect of MPAA Ratings on Older Children's Expectations of Violent Content



Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 0, "not at all violent," to 4, "very very violent."

We also found a significant main effect for rating on older children's ratings of age-appropriateness for the different MPAA ratings, $F (4, 185)=4.29$, $p < .01$. Figure 12 shows the means associated with this effect. Subsequent tests revealed that older children who saw the rating "R" believed the show was more appropriate for older viewers ($M = 12.3$) than children who saw either no rating ($M = 8.5$), "G" ($M=9.1$), or "PG" ($M=9.0$).

Figure 12
Effect of MPAA Ratings on Older Children's Expectations of Age-Appropriateness

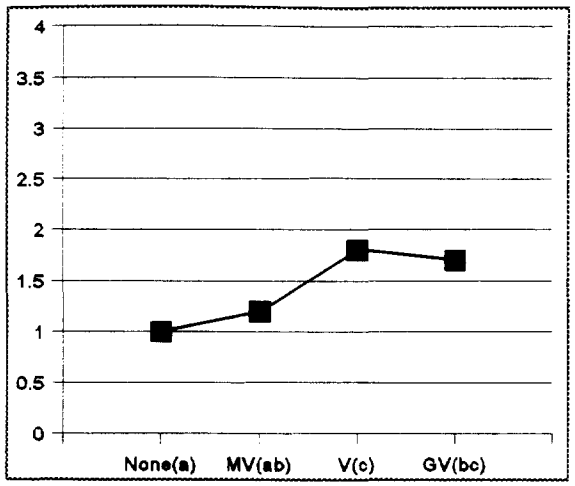


Note. Conditions with no parenthesized letter in common are significantly different. Numbers refer to age in years.

The MPAA ratings did not produce significantly different expectations of scariness among the older children.

Premium channel codes. There was a significant main effect of premium channel codes on older children's expectations of violent content, F (3, 186)=6.17, $p < .001$. Subsequent tests revealed that children who did not see a violence code expected significantly less violence (M = 1.0) than children who saw either "V: Violence" (M = 1.8) or "GV: Graphic Violence" (M = 1.7). In addition, children in the "MV: Mild Violence" condition (M = 1.2) expected less violence than those in the "V: Violence" group. This pattern is shown in Figure 13.

Figure 13
Effect of Premium Channel Codes on Older Children's Expectations of Violent Content

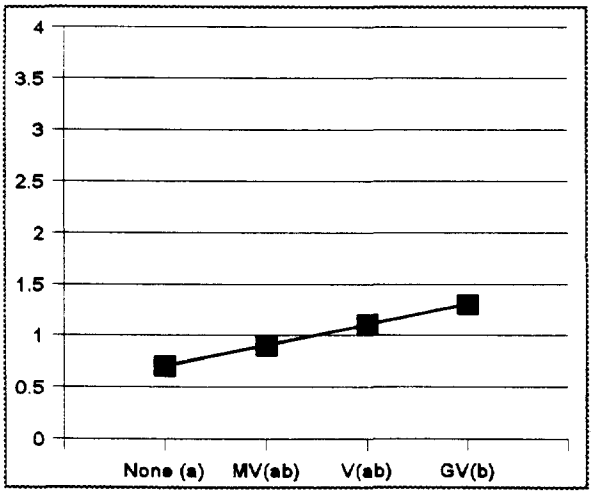


Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 0, "not at all violent," to 4, "very very violent."

MV: Mild Violence
V: Violence
GV: Graphic Violence

We also found a significant main effect of premium channel codes on older children's expectations of a movie's scariness, F (3, 185)=2.80, $p < .05$. The pattern of means is shown in Figure 14. The post-hoc comparisons revealed that children who saw "GV: Graphic Violence" thought the show would be more scary than children who saw no rating (1.3 vs. 0.7). A significant interaction between rating and sex qualified this finding, $F(3,185)=3.56$, $p< .05$. However, none of the post-hoc comparisons for the interaction were significant.

Figure 14
Effect of Premium Channel Codes on Older Children's Expectations of Scariness



Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 0, "not at all scary," to 4, "very very scary."

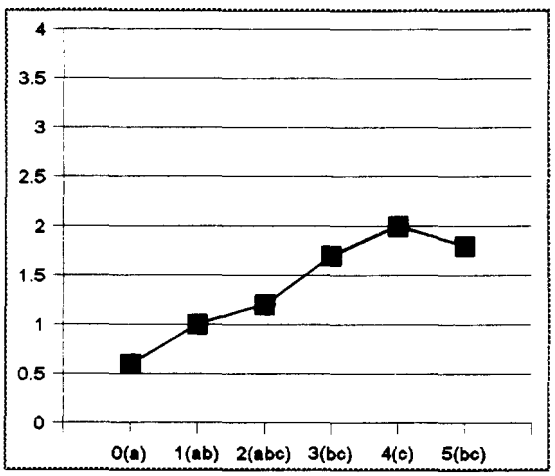
MV: Mild Violence
V: Violence
GV: Graphic Violence

None of the premium channel codes significantly influenced older children's perceptions of the age-appropriateness of the movie.

RSAC ratings. A significant interaction between RSAC ratings and sex was found on older children's expectations of scariness, F (4, 184)=2.44, $p < .05$. However, none of the subsequent tests of the simple effect comparisons were significant. These codes did not affect older children's expectations of violence or age-appropriateness.

Canadian ratings. We found a significant main effect of the Canadian ratings on older children's expectations for violence, F (5, 183)=6.02, $p < .001$. The pattern of means is shown in Figure 15. Post-hoc analyses revealed that older children who saw the rating "no violence" believed there would be less violence in the show (M = 0.6) than children who saw "brief violence" (M=1.7), "violence" (M = 2.0), or "graphic violence" (M = 1.8). In addition, "comedic violence" (1.0) was associated with lower expectations of violence than "violence."

Figure 15
Effect of Canadian Ratings on Older Children's Expectations of Violent Content



Note. Conditions with no parenthesized letter in common are significantly different. Scores could range from 0, "not at all violent" to 4, "very very violent."

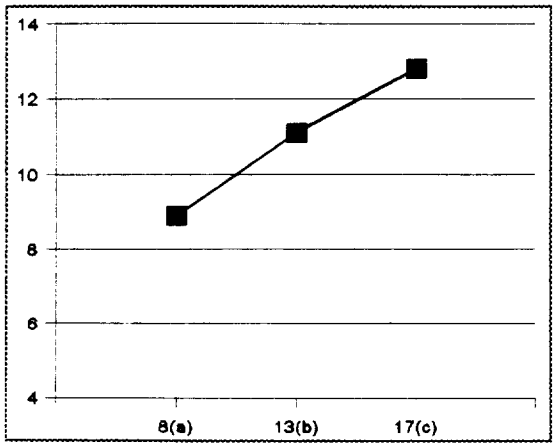
0 = No Violence
1 = Comedic Violence
2 = Mild Violence
3 = Brief Violence
4 = Violence
5 = Graphic Violence

The Canadian ratings did not affect older children's expectations of scariness or age appropriateness.

Age indicators. The 2 X 3 X 2 analysis revealed a significant effect of mentioning a particular age on expectations of age-appropriateness, $F(2,130)=16.4$, $p < .001$. Figure 16 shows the pattern of means associated with this main effect. As would be expected, post-hoc tests revealed that older children who saw any mention of age 17 believed the show was appropriate for an older audience (M=12.8) than children who saw

age 8 (M=8.9) or 13 (M=11.1). In addition, the difference in judgments between children who saw age 8 and children who saw age 13 was statistically significant.

Figure 16
Effect of Age Indicators on Older Children's Expectations of Age-Appropriateness



Note. Conditions with no parenthesized letter in common are significantly different. Numbers refer to age in years.

The age indicators did not exert a significant effect on older children's expectations regarding a program's violence or scariness.

Awards. The awards had no significant effects on older children's expectations of violence, scariness or age-appropriateness.

Evaluation of the Movie Clip

Memory for Content Codes

Children's attitudes toward and perceptions of the movie clip they saw were evaluated as a function of the rating it had received in their booklet. As a first step to exploring these relationships, we examined the percentage of younger and older children who correctly remembered the rating after seeing the clip. We found that 60% of the younger children answered "don't know" when asked what the movie's rating was, and that the percentage of children in each condition who accurately recalled the movie's rating was very small (no rating: 5%, MV: 12%, V: 18%, and GV: 17%).

A much higher percentage of the older children correctly identified the movie's rating (no rating: 18%, MV: 52%, V: 27%, and GV: 39%). Overall, 34% of the older children and 13% of the younger children provided the correct response to this question. Surprisingly, there was no effect of questionnaire order. A chi square analysis revealed